



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

DATE: AUG 21 2018

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Lincolnland Agri-Energy, LLC

FROM: Gregory Gehrig, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Chief
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Lincolnland Agri-Energy, LLC

Facility Location: 10406 North 1725th St, Palestine, IL

Date of Inspection: July 23, 2018

Lead Inspector: Gregory Gehrig, Environmental Engineer

Other Attendees: Dakota Prentice, Environmental Engineer, U.S. EPA;
Mark Riggs, EHS and Compliance Manager, Lincolnland Agri-Energy, LLC

Contact Email: mriggs@lincolnlandagrienergy.com

Purpose of Inspection: CAA Compliance

Facility Type: Ethanol production from corn

Regulations Central to Inspection: SIP, NSPS and MACT

Arrival Time: 1300 hrs

Departure Time: 1450 hrs

Inspection Type:

- ☒ Unannounced Inspection
☐ Announced Inspection

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OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from facility personnel.

Company Ownership: Same ownership since at least 2013.

Process Description:

Lincolnland Agri-Energy, LLC (Lincolnland) has the permitted capacity to produce 70 million gallons per year (mmgpy) of ethanol from corn and is currently operating around 60 mmgpy. They also produce distillers dried grains (DDGS). The facility was designed by ICM and built by Fegan. They have five fermentors, one beer well and one associated scrubber for pollution control. Lincolnland uses one recuperative thermal oxidizer (RTO) to control emissions from the mash drying operations conducted to DDGS.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

FLIR video was taken of volatile organic compound (VOC) emission points and possible VOC emission points. Lincolnland was operating normally during the facility tour. The following was observed during the tour:

- Control room, where air pollution control readings were collected.
- Scrubber, which was operating at a pressure differential of 27.4 inches of water and additive flow rate of 15 gallon per day.
- A pre-condenser to the scrubber, which was operating at an inlet pressure of 16.5 inches of water.
- Fermentors and beer well, where VOCs were observed venting uncontrolled from some agitators.
- Distillation/molecular sieves.
- RTO, which was operating at 1,440 °F.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

- Semi-Annual LDAR report for January 1 to June 30, 2018 (taken)
- Facility diagram (taken)

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CLOSING CONFERENCE

Requested documents:

- None

Compliance Assistance: EPA indicated that Lincolnland should fully investigate and mitigate uncontrolled venting from agitators on top of the fermentors.

Concerns: Uncontrolled venting from agitators on top of the fermentors.

SIGNATURES

Lead Inspector: Gregory Kelly Date: 8-21-18
Section Chief: [Signature] for Sarah Marshall Date: 8/21/18

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APPENDIX A: DIGITAL IMAGE LOG

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| 1. Inspector Name: Gregory Gehrig | 2. Date(s) of Inspection: July 23, 2018 |
| 3. Company/Facility Name: Lincolnland Agri-Energy, LLC | 4. Street Address, City, State: 10406 North 1725th St, Palestine, IL |
| 5. Number of Images: 7 | 6. Archival Record Location: CD-R labeled Lincolnland Images 7.23.2018 |

| Image name | Date and Time (CDT) | Description |
|-------------------|----------------------------|--|
| MOV_1986* | July 23, 2018 at 1413 | FLIR video of scrubber outlet; components on beer well and Ferm #3, Ferm #5 and Ferm #4. Venting agitators on beer well, Ferm #5, and Ferm #4. |
| MOV_1987* | July 23, 2018 at 1419 | FLIR video of components on Ferm #1 and Ferm #2; and venting agitator on Ferm #2. |
| IMG_0103 | July 23, 2018 at 1349 | Photo of RTO stack. |
| IMG_0104 | July 23, 2018 at 1410 | Photo of fermentation scrubber. |
| IMG_0105 | July 23, 2018 at 1413 | Photo of Ferm #1. |
| IMG_0106 | July 23, 2018 at 1417 | Photo of pressure relief conservation vent on Ferm #3. |
| IMG_0107 | July 23, 2018 at 1419 | Photo of pressure relief conservation vent on Ferm #3, noting clean in place residue. |

*FLIR camera time signature incorrect, but date and time listed above are accurate.